



BEFORE THE BOARD OF APPEALS

Chizu SHIMIZU et al.

Serial Number: 08/792,468

Filed: January 31, 1997

Group Art Unit: 2876

Examiner: M. Lee

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of:

Chizu SHIMIZU et al.

Serial Number: 08/792,468

Group Art Unit: 2876

Filed: January 31, 1997

Examiner: M. Lee

For: PURCHASED COMMODITY ACCOMMODATING AND TRANSPORTING
APPARATUS HAVING ELEMENTS FOR PURCHASING A COMMODITY FIXED TO
A TRANSPORTABLE ACCOMMODATION SECTION (AS AMENDED)

BRIEF ON APPEAL

Assistant Commissioner for Patents
Washington, D.C. 20231

Date: October 15, 1998

Sir:

Following the filing the Notice of Appeal on July 15, 1998, the period for response having been extended by one month, the following is the Applicants' Appeal Brief. The Commissioner is authorized to charge FOUR HUNDRED TWENTY DOLLARS (\$420.00), which includes the \$310.00 fee for filing a Brief on Appeal and \$110.00 fee for a one-month extension of time, to our deposit account no. 01-2340, as well as any other fees required by the PTO to make this a complete and timely filing. A one-month Petition for Extension of time is being filed concurrently herewith.

I. REAL PARTY IN INTEREST

The real party in interest is Fujitsu Limited, 1015, Kamikodanaka, Nakahara-ku, Kawasaki-shi, Kanagawa, 211 Japan.

II. RELATED APPEALS AND INTERFERENCES

There should be no other related appeals or interferences. An appeal in grandparent application Serial No. 08/274,041 was started March 6, 1997. However, this appeal should have



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been terminated by the filing of an amendment on January 7, 1998 canceling all remaining rejected claims.

III. STATUS OF THE CLAIMS

This is an appeal from the action of the Examiner, dated January 15, 1998, finally rejecting claims 13-36. Claims 13-36 are appealed and are set forth in the attached APPENDIX.

The claims and specification stand as amended by the amendments dated August 30, 1996, December 26, 1996, March 24, 1997, and November 26, 1997. Additionally, it is requested that the amendment dated May 14, 1997 (filed after the outstanding final Office Action) be entered at this time.

IV. STATUS OF AMENDMENTS AFTER THE FINAL REJECTION

The amendment filed May 14, 1997 has been indicated that it will be entered upon filing this Appeal Brief. This amendment of May 14, 1997 is therefore assumed to be entered. However, if this amendment has not been entered, it is respectfully requested that this amendment be entered at this time.

V. SUMMARY OF THE INVENTION

One Embodiment of the Invention

The invention relates to a purchased commodity accommodating and transporting apparatus such as a shopping cart or a shopping basket, and a method of shopping. The purchased commodity accommodating a transporting apparatus may be used in a store (for example a supermarket) to allow a customer to select and transport a purchased commodity. More particularly, the customer may purchase commodities utilizing the purchased commodity accommodating and transporting apparatus.

One detailed example of one embodiment of the invention is illustrated in Figs. 10, 11 and 29-33 and described starting on page 104 of the specification of this application. Referring first to Figs. 10 and 11, a scanning cart 100 includes a cart section 101, shown in Fig. 10, and a basket member 102, shown in Fig. 11, which serves as one example of an accommodation section. The cart section

101 is constructed so as to receive basket 102 thereon and includes a handle section 103 to allow grasping by a customer and roller members 104 provided on the bottom of cart section 101. Accordingly, a customer can accommodate commodities to be purchased into the basket member 102 while freely moving the cart section 101 on which the basket member 102 is placed.

The cart section 101 further includes a scanner 57 for reading a bar code applied to a commodity as well as a communication section 53 for communicating from and to an upper control section (management section 60 in Fig. 7), a display section 54 for displaying various information, and a keyboard section 55 for inputting various information. Generally, a customer reads a bar code applied to each commodity to be purchased by use of scanner 57 to read the commodity code information into the upper control section, places such commodities into the basket member 102, and depresses, after selection of the commodities to be purchased is completed, an end key on the keyboard section 55.

As shown in Fig. 30, the control system of scanning cart 100 further includes a communication section 83, a printer 84, a sensor 85, and a commodity information file 86. The communication section 83 updates, when a prepaid card 87 is inserted into it, remains information of the prepaid card 87. The printer 84 performs a printing operation in order to issue a receipt on scanning card 100. Sensor 85 is provided in proximity of an upper opening of the basket section 102 for optically detecting accommodation of the commodity 50 into the basket 102. The commodity information file 86 stores commodity information such as the commodity numbers, the commodity names, and the prices, for example.

According to this structure, since the final settlement of accounts, which is conventionally performed at a settlement point of sales (POS) terminal (for example, requiring an employed cashier), a customer is allowed to settle accounts by self service, using a prepaid card 87. Thus, not only does this structure reduce the burden on store employees (for example, they are not required to scan the products and settle accounts) and thus allows reduction on a number of cashiers, but the waiting time at settlement POS terminals is eliminated for customers. Accordingly, a remarkable reduction of the shopping time and enhancement in the convenience for the customer can be realized.

Such structure also allows for a new method of shopping. By attaching a commodity code reader to a transportable container, the consumer is able to register a commodity and purchase the commodity at the site of selecting the commodity.

According to another embodiment, instead of a prepaid card 87, a credit card or a bank card may be used in place of the prepaid card 87.

Sensor 85 and weighing equipment 58 are one example of the structure which may be employed to avoid the erroneous accommodation of a commodity in the transporting apparatus without properly scanning the bar card of that commodity, thus preventing errors in the selection and accidental or purposeful selection of a commodity without properly paying for that commodity.

VI. ISSUES

The issue presented for review before the Board in this Appeal are: (a) whether claims 13-23, 27-30, and 32-36 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski*; (b) whether claims 24-26 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski* and *Ehrat*; and (c) whether claim 31 is properly rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski* and *Heheman*.

VII. GROUPING OF CLAIMS

Claims 13-26, considered to stand or fall together, are directed to an apparatus having a self scanning function.

Claims 27 and 30-34, considered to stand or fall together, are directed to a method of purchasing a first commodity.

Claim 28 (depending from claim 27), considered to stand or fall alone, is directed to a method of purchasing first and second commodities at respective first and second selection sites.

Claim 29 (depending from claim 27), considered to stand or fall alone, recites that the payment processor is permanently fixed to a transportable container.

Claims 35 and 36, considered to stand or fall together, are directed to a method of purchasing a commodity using a computer section permanently attached to a transportable container.

VIII. ARGUMENT

The Prior Art Fails to Teach or Suggest Structure for *Purchasing* a Commodity Permanently Fixed to a Transportable Accommodation Section.

Claims 13-26

Claims 13-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski*. Also, claims 24-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski* and *Ehrat*.

Claims 13-26 are directed to a purchased commodity accommodating and transporting apparatus including a commodity code reading section for reading a commodity code applied to a commodity, a transportable accommodation section for accommodating and transporting a commodity, and a structure for allowing the *purchasing* of the commodity permanently fixed to the transportable accommodation section. Specifically, claims 13-21 recite a prepaid card inputting processing section "wherein, said commodity code reading section, said prepaid card inputting processing section, said commodity price retrieval section, and said data updating section are permanently fixed to said transportable accommodation section."

Claims 22 and 23 recite a magnetic card reading section for receiving a credit card or a bank card "wherein, said commodity code reading section, said magnetic card reading section, and said data commodity price retrieval section are permanently fixed to said transportable accommodation section."

Claims 24-26 depend from any one of claims 13-23, and thus require one of the above-noted structures.

As a result of such structure, a consumer is able to register a commodity and purchase the commodity without the need for a cashier or a separate POS terminal.

Collins, Jr. '947.

Fig. 1 of *Collins, Jr. '947* illustrates a checkout system including a portable scanning terminal 44 which is removably mounted on the handles 46 of adjacent grocery cart 48 and 50. A checkout operator 54 will mount the scanning unit 44 on the handles in such a manner to allow the operator or the customer to checkout the merchandise items located in the grocery cart 50.

In a second embodiment of *Collins, Jr. '947*, illustrated in Figs. 3 and 5, support member 68 is rigidly mounted to handle 46 and handle support member 76. As stated in column 4, lines 63-66, scanning terminal 44 is mounted between carts 48 and 50 in the manner similar to the first embodiment. The Abstract indicates that this second embodiment provides a support member removably mounted to the handle of a grocery cart containing purchased merchandise items. Additionally, column 1, lines 34-36 further emphasize that the scanning terminal is removably mounted.

As recognized by the Examiner, *Collins, Jr. '947* fails to teach or suggest a commodity code reading section, a prepaid card inputting processing section, a commodity price retrieval section and a data updating section are permanently fixed to a transportable accommodation section, as recited by claims 13-21; nor a commodity code reading section, a magnetic card reading section, and commodity price retrieval section permanently fixed to the transportable accommodation section as recited by claims 22 and 23. See page 3, lines 12-14 of the Office Action dated January 15, 1998.

Gogulski

Gogulski teaches a mobile automated shopping system including a scanner, a control unit, and a display mounted on a shopping cart. As the shopper proceeds down aisles of the store, the shopper selects an item off the shelf and scans the line-encoded data imprinted on the item. The price of that item appears on the display unit along with the item's unit price and identification. A second stationary scanner is utilized to enter the price total on the customer's receipt. After using the second scanner, the customer places the item into the shopping cart and the weight of that item is sensed by a weight sensing device located on the bottom of the cart. If the weight of the item is the same as the weight data stored within the central computer for that item, the item will be accepted.

However, *Gogulski* fails to teach or suggest the ability to purchase the item with the system attached to the cart. In particular, a check-out station is still required. Fig. 4 illustrates a check-out station where a copy of a tape, recording each item to be purchased, is utilized to purchase the items. The total of the tape is entered and payment is made by cash or charge card by the customer at the check-out station. See column 7, lines 34-38 of *Gogulski*.

Ehrat

Fig. 13 of *Ehrat* illustrates a check-out station 4 including contact position 96 to which an appliance connector 95 of purchase trolley 2 may be connected. As the customer arrives with the trolley at the check-out station 4, contact between the appliance connection 95 on the trolley and contact position 96 is established to transfer article designation to check-out station 4. The amount to be paid is indicated on panel 4c.

The trolley may include a container in which the customer places articles including means for reading the data applied to each article as it is placed or removed from the container.

Ehrat is similar to *Collins, Jr. '947* in that it does not allow a consumer to purchase commodities when selecting the commodity; both references teach the purchase of the commodities at a checkout station with a checkout operator.

Thus, none of *Collins, Jr. '947*, *Gogulski*, nor *Ehrat* teach or suggest an ability to purchase a commodity without the use of a check-out station. While *Gogulski* teaches certain structures mounted on a shopping cart, *Gogulski* still requires payment at a check-out station. Thus, *Gogulski* does not suggest modifying *Collins, Jr. '947* to permanently fix either a prepaid card inputting processing section or a magnetic card reading section to a transportable accommodation section. It is respectfully asserted that one of ordinary skill in the art, when presented with the teachings of *Collins, Jr. '947*, *Gogulski*, and *Ehrat* would find no motivation for eliminating the use for a check-out station, or otherwise allow a customer to purchase a commodity without the assistance of a cashier or a separate point of sales terminal. One of ordinary skill in the art would fail to find any suggestion in *Collins, Jr. '947*, *Gogulski*, and *Ehrat* to permanently fix a prepaid card inputting

processing section to a transportable accommodation section, as recited by claims 13-21, or permanently fix a magnetic card reading section to a transportable accommodation section, as required by claims 22 and 23. Thus, it is respectfully asserted that the recitations of these claims would not have been obvious at the time of the invention, and requested that the Board reverse the Examiner's rejection. As noted above, claims 24-26 require the recitations of one of claims 13-23, and thus are allowable at least for this reason. It is therefore requested that the Board reverse the Examiner's rejection with respect to these claims.

The Prior Art Fails to Teach or Suggest a Method Where a Consumer Selects and Purchases a Commodity as Set Forth in Claims 27-36

Claims 27-30 and 32-36 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski*. In addition, claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Collins, Jr. '947* in view of *Gogulski* and *Heheman*.

Claims 27 and 30-34

Claims 27 and 30-34 are directed to a method of purchasing commodities by a consumer using a transportable container. These claims recite that the consumer performs the steps of selecting a first commodity to be purchased at a first selection site, reading the commodity code of the first commodity at the first selection site using a commodity code reader attached to a transportable container, and paying for the first commodity at the first selection site using a payment processor attached to the transportable container.

As discussed above, both *Collins, Jr. '947* and *Gogulski* require the use of a check-out station a cashier, a point-of-sales terminal, etc., to purchase commodities. Neither *Collins, Jr. '947* nor *Gogulski* suggest that a consumer himself or herself perform the necessary steps to purchase the commodity, and more particularly, the steps of selecting a commodity, reading the commodity code, and paying for a commodity using a payment processor attached to a transportable container, all at a first selection site as required by claims 27, 30, and 32-34.

Heheman

Heheman is merely used by the Examiner to show a transportable container which is a hand carried basket. However, *Heheman* does not correct the deficiencies noted above with respect to *Collins, Jr. '947* and *Gogulski*. In view of the above, it is respectfully requested that the Board reverse the Examiner's rejection with respect to claims 27 and 30-34.

Claim 28

Claim 28 requires all of the recitations of claim 27, and is allowable for at least the above-noted reasons. In addition, claim 28 recites selecting a second commodity to be purchased at a second selection site, different from the first selection site, and reading a second commodity at the second selection site, and paying for the second commodity using the payment processor attached to the transportable container. None of the prior art teaches or suggests selecting commodities at two different selection sites and paying for those commodities using a payment processor attached to the transportable container at one of the selection sites. In view of the above, it is respectfully requested that the Board reverse the Examiner's rejection with respect to claim 28.

Claim 29

Claim 29 depends from claim 27 and thus is allowable at least for the reasons given above with respect to claim 27. In addition, claim 29 recites, "the commodity code reader and the payment processor are permanently fixed to the transportable container." Thus, claim 29 sets forth a method in which a commodity is selected, a commodity code of the commodity is read, and the commodity is paid for all at a first selection site using a payment processor which is permanently fixed to the transportable container. As shown above with respect to claims 13-26, the prior art fails to teach or suggests a payment processor permanently fixed to a transportable container, nor the use of such a payment processor. In view of the above, it is respectfully requested that the Board reverse the Examiner's rejection with respect to claim 29.

Claims 35 and 36

Claims 35 and 36 set forth a method where a consumer performs the steps of, for each commodity to be purchased, selecting a commodity, storing a commodity code of the selected commodity, and placing the selected commodity in a transportable container. Then, the consumer indicates the end of selecting commodities and pays for all commodities using a computer section permanently attached to the transportable container. As shown above, the prior art fails to teach or suggest the use of any structure permanently attached to a transportable container for paying for selected commodities. In view of the above, it is respectfully requested that the Board reconsider and withdraw the Examiner's rejection with respect to claims 35 and 36.

As set forth above, it is respectfully asserted that the prior art fails to teach or suggest the recitations of the claims. The Applicant respectfully requests the Board to reverse the Examiner's rejections and allow this application to issue.

Respectfully submitted,

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IX. APPENDIX

CLAIMS ON APPEAL

13. A purchased commodity accommodating and transporting apparatus having a self scanning function, comprising:

a commodity code reading section for reading a commodity code applied to a commodity;

a transportable accommodation section for accommodating therein and transporting a commodity whose commodity code has been read by said commodity code reading section;

a prepaid card inputting processing section for receiving a prepaid card and reading remains information of the prepaid card;

a commodity price retrieval section for retrieving the price of the commodity in accordance with the commodity code information read by said commodity code reading section; and

a data updating section for registering a result obtained by subtraction of the price of the commodity retrieved by said commodity price retrieval section from the remains information read by said prepaid card inputting processing section as remains information of the prepaid card to update the remains information;

wherein, said commodity code reading section, said prepaid card inputting processing section, said commodity price retrieval section and said data updating section are permanently fixed to said transportable accommodation section.

14. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 13, further comprising a notification section for notifying, when the remains read by said prepaid card inputting processing section runs short of the price of the commodity retrieved by said commodity price retrieval section, such shortage.

15. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 14, further comprising a selection section for selecting, when the remains read by said prepaid card inputting processing section runs short of the price of the commodity retrieved by said commodity price retrieval section, whether the purchasing processing is to be continued by inserting a second prepaid card into said prepaid card inputting processing section or the purchasing processing is to be ended.

16. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 13, further comprising a receipt issuance section for issuing a receipt upon completion of the purchasing.

17. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 14, further comprising a receipt issuance section for issuing a receipt upon completion of the purchasing.

18. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 15, further comprising a receipt issuance section for issuing a receipt upon completion of the purchasing.

19. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 16, further comprising a receipt issuance selection section for selecting whether the issuance of a receipt by said receipt issuance section is necessary or unnecessary.

20. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 17, further comprising a receipt issuance selection section for selecting whether the issuance of a receipt by said receipt issuance section is necessary or unnecessary.

21. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 18, further comprising a receipt issuance selection section for selecting whether the issuance of a receipt by said receipt issuance section is necessary or unnecessary.

22. A purchased commodity accommodating and transporting apparatus having a self scanning function, comprising:

a commodity code reading section for reading a commodity code applied to a commodity;

a transportable accommodation section for accommodating therein and transporting a commodity whose commodity code has been read by said commodity code reading section;

a magnetic card reading section for receiving a credit card or a bank card and reading magnetic information of the card;

a commodity price retrieval section for retrieving the price of the commodity in accordance with the commodity code information read by said commodity code reading section; and

an automatic clearing processing section for automatically clearing the amount of money corresponding to the price of the commodity retrieved by said commodity price retrieval section from an account corresponding to the magnetic information of the card read by said magnetic card reading section;

wherein, said commodity code reading section, said magnetic card reading section and said data commodity price retrieval section are permanently fixed to said transportable accommodation section.

23. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 22, further comprising a prepaid card inputting processing section for receiving a prepaid card and reading remains information of the prepaid card, and a data updating section for registering a result obtained by subtraction of the price of the commodity retrieved by said commodity price retrieval section from the remains information read by said prepaid

card inputting processing section as remains information of the prepaid card to update the remains information.

24. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in any one of claims 13 to 23, further comprising a data reception section for receiving data from a management section, and a power on/off drive section for automatically turning the power source on/off in response to a power on/off instruction received from said management section by way of said data reception section.

25. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in any one of claims 13 to 23, further comprising a weighing equipment for measuring the total weight of commodities accommodated in said accommodation section measured by said weighing equipment, and an alarm generation section for generating an alarm when it is determined by said weight determination section that the total weight of the commodities in said accommodation section measured by said weighing equipment has changed without reading a commodity code by said commodity code reading section.

26. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 24, further comprising a weighing equipment for measuring the total weight of commodities accommodated in said accommodation section, a weight determination section for detecting the variation of the total weight of the commodities in said accommodation

section measured by said weighing equipment, and an alarm generation section for generating an alarm when it is determined by said weight determination section that the total weight of the commodities in said accommodation section measured by said weighing equipment has changed without reading a commodity code by said commodity code reading section.

27. A method of a purchasing commodities by a consumer using a transportable container, the consumer performing the steps of:

- (a) selecting a first commodity to be purchased at a first selection site;
- (b) reading a first commodity code of the first commodity at the first selection site, using a commodity code reader attached to the transportable container; and
- (c) paying for the first commodity at the first selection site as a function of the first commodity code read in step (b), using a payment processor attached to the transportable container.

28. The method of claim 27, further comprising:

- (d) selecting a second commodity to be purchased at a second selection site, different from the first selection site; and
- (e) reading a second commodity code of the second commodity at the second selection site;

wherein step (c) includes paying for the second commodity as a function of the second commodity code read in step (e), using the payment processor attached to the transportable container.

29. The method of claim 27, wherein the commodity code reader and the payment processor are permanently fixed to the transportable container.

30. The method of claim 27, wherein the transportable container is grocery cart.

31. The method of claim 27, wherein the transportable container is a hand carried basket.

32. The method of claim 27, wherein the commodity code reader is a bar code scanner.

33. The method of claim 27, wherein the payment processor is a credit card scanner.

34. The method of claim 27, wherein the payment processor is a debit card scanner.

35. A method of purchasing commodities using a transportable container, the method comprising a consumer performing the steps of:

- (a) selecting a commodity to be purchased;
- (b) storing a commodity code of the commodity selected in step (a);
- (c) placing the commodity selected in step (a) in the transportable container;
- (d) repeating steps (a) - (c) for each commodity to be purchased;
- (e) indicating the end of selecting commodities by a computerized input to a computer section permanently attached to the transportable container; and

(f) paying for all commodities selected in step (a) using the computer section attached to the transportable container.

36. The method of claim 35, further comprising:

(g) performing wireless communication with a management control section and the computer section attached to the transportable container.